History of the IT Project Management Qualification Process (Previously known as the IT Project Management Certification Process)

1.0 Preface

This white paper is intended to provide readers with an overview of the Department of Energy's Information Technology (IT) Project Management Certification Process and background on the framework for the development of the process. It also provides managers and staff with practical information designed to help them better understand the requirements for achieving IT Project Management Certification.

2.0 Background

2.1 OMB Requirement

The Office of Management and Budget (OMB), in a continuing effort to strengthen accountability for information technology (IT) expenditures, stated that beginning in FY 2004, IT projects must be managed by a qualified project manager (PM) or risk loss of funding.

2.2 Initial Planning

Because OMB did not define "qualified" in their requirement, DOE went on the hypothesis that each agency could have their own definition of "qualified" and setup their individual tailored process. DOE established an internal team to discuss and research project management certification initiatives and services provided by NASA, USDA, DOJ, HUD, GSA (STAR program), OPM, Federal CIO Council, Project Management Institute (PMI), ESI International, Management Concepts, National Defense University, George Washington University, and American University.

The team also met with the Project Management Career Development Program (PMCDP) Team. The PMCDP team was formed after the Secretary tasked the Office of Engineering and Construction Management, ME-90, with developing a program to increase the quality/capabilities of the Department's Project Managers. The PMCDP's focus is construction and engineering. The PMCDP team was helpful in identifying the concepts of levels of PMs, general courses and experiences required. Meetings were also conducted with the CFO's office where it was agreed that the CIO should leverage the PMCDP program. The CFO's office representative agreed to fund courses needed in FY 2003 and FY2004. Congress subsequently instructed DOE that starting in FY2004 the PMCDP should become a business line within the Working Capital Fund.

2.3 Leveraging the PMCDP

The Office of the CIO partnered with the Office of Engineering and Construction Management in its efforts to establish a certification process similar to the PMCDP but specifically responsive to IT requirements. The PMCDP program, based upon the core competencies of the PMI, builds core project management skills to be leveraged in various functional areas across DOE. The governance for the certification process will expand upon existing IT capital planning and investment control policy and procedures within the CIO's office.

3.0 IT Project Management Certification Process

3.1 Systems (Investments) Categorization

A 3-level certification process has been identified to address the enterprise IT community. The IT investment is categorized into the appropriate level according to the following criteria:

- Level 1: infrastructure/legacy type systems, maintenance, modification of existing systems, single function, single office, and/or low policy impact, less than \$2M
- Level 2: more complex, multiple-DOE components, multi-function, political, high policy impact, inter-departmental, inter-program, inter-agency, mission critical, financial, new development, and/or multi-year, greater than \$2M
- Level 3: portfolio management

The IT certification levels are for major IT investments and are classified as major if it meets any of the following OMB defined criteria:

- An estimated investment cost of \$2 million or more in one year;
- A financial system with an estimated investment cost of \$500 thousand or more in one year
- A grants management IT investment, regardless of dollar value;
- Requires special management attention because of its importance to the agency mission;
- Has high development, operating, or maintenance costs, high risk or high return;
- Plays a significant role in the administration of agency programs, finances, property, or other resources:
- Is E-Government in nature or uses e-business technologies, regardless of dollar value.

3.2 Certification Process Approach

In order to meet OMB requirements, all IT PM's, as identified in DOE's Capital Planning Program (A-11, Exhibit 300's), must be certified by the Office of the CIO to the appropriate level. The IT Project Management Certification Process has been developed to provide the framework for this certification.

For the first year, in an effort to meet OMB's deadlines, all IT PM's were to be certified as level 1. In subsequent years, the process is being expanded to encompass the higher-end program managers as well as entry level task monitors to assure succession planning for future PM's.

As IT PMs are identified by the submission of Exhibit 300's, their certification level is determined by the system categorization.

3.3 IT Project Management Profile

Individual PMs complete an IT Project Manager Profile. The profile is a compilation of the experience and course work for Levels 1, 2 and 3 certifications. The information provided is evaluated by a cross functional team within the CIO's offices to determine competencies and equivalencies, based on previous education, training, and experience, for IT PM certification.

3.4 Assessment Test

An independent assessment test is available to earn equivalency for some of the certification requirements. This assessment is a purely objective measure of an individual's Project Management

Knowledge and is offered by ESI International. A score of 70 percent or better is considered passing. The PMCDP had purchased a quantity of these tests and agreed to give the CIO's Office an initial 75 seats. Additional seats have been requested. The Assessment Test covers Project Management Knowledge in the areas of:

- Project Integration Management
- Scope Management
- Project Time Management
- Project Cost Management
- Project Quality Management
- Project Human Resource Management
- Project Communications Management
- Project Risk Management
- Project Procurement Management
- Professional Responsibility Domain

The CIO also recognizes the Project Management Institute (PMI) Project Management Professional (PMP) certification as an independent evaluation.

3.5 Certification Requirements

For certification at IT Level 1 the candidate must have: PM Essentials or equivalent (be a certified Project Management Professional [PMP] from the Project Management Institute or score a passing grade on the PM assessment, or extensive PM training); COR/COTR training; Earned Value Management System (EVMS) training; and 3 years PM experience.

For certification at IT Level 2 the candidate must have the IT Level 1 Certification and: Advanced Concepts in PM; IT Risk Management training; and 5 years PM experience.

For certification at IT Level 3 the candidate must have the IT Level 2 Certification, Project Management & Portfolio Analysis Simulation, Federal Budget Process training; and 7 years PM experience.

4.0 Driving Legislation and Related Programs

4.1 DOE O361.1 Acquisition Career Development Order

The IT Project Management Certification Process is being documented as an attachment to the DOE O 361.1, Acquisition Career Development Order. Included in this order is the issue of providing incentive pay to certified project managers.

The PMCDP process provides for the ability to give incentive pay to PMCDP certified project managers. The IT Project Management Process is proposing to adopt the same guidelines for IT Certified Project Managers. The incentive pay guidance will be outlined in the attachment to DOE O 361.1.

4.2 IT Capital Planning and Investment Control (CPIC)

4.2.1 Integration with the CPIC Process

The IT Project Management Certification Program has been integrated with the Exhibit 300 Budget Submission process. When draft 300's are reviewed by the OCIO, the certification status of the IT project manager is validated and documented as part of the scoring process.

4.2.2 Integration with Unicall Process

The IT Project Management Certification Program is being integrated with the Unicall process by including certification requirements into the Budget Call. The intent is to provide early notification to the Program Offices of the need to have a certified Project Manager assigned to IT Exhibit 300 projects. The integration with Unicall should begin with the FY06 budget cycle.

4.2.3 Integration with CPIC Quarterly Control Reviews

The IT Project Management Certification Process is being integrated with the Control Reviews for IT Exhibit 300 projects. The Control Reviews will be conducted on a quarterly basis. Questions regarding the Project Manager's certification level or activities to achieve certification level are included in the review. The Control Reviews will also provide a vehicle for alerting the contract person for the IT Project Management Certification process to a change in the Project Manager assigned to a project.

5.1 Alignment with the Federal CIO Council IT Project Manager Guidance

In July 2004, the Federal CIO Council developed the Federal IT Project Manager Guidance referred to in the FY 2005 Budget Passback that required that by September 30, 2004, all major projects be managed by project managers qualified in accordance with CIO Council guidance.

As a result, the DOE IT Council reviewed the DOE IT Project Management Certification Plan to Align with the Federal CIO Council IT Project Manager Guidance. The DOE IT PM Certification process was already closely aligned with the Federal CIOC guidelines; however, several recommendations were accepted to more closely align to OMB requirements. The IT Council adopted the recommendation to change from a certification process to a qualification process.

Through an ongoing effort to strengthen the caliber of DOE's qualified IT PMs, the IT PM qualification process has been modified to include Earned Value Management Systems (EVMS) training at DOE's qualification Level 1 instead of at Level 2. EVMS has been deemed to be a critical component of the basic IT project management skill set and the Department is focused on integrating the principles of EVMS with its management of major IT investments. The IT Council, acting as the governing body for the IT PM Qualification Process as agreed with the recommendation that DOE IT Project Managers previously certified at Level 1 without EVMS training are required to complete EVMS training by September 30, 2005 to maintain Level 1 Qualification. DOE's OCIO has developed a plan of action to work through the DOE IT Council to continue to modify the DOE IT PM Qualification process to further align it with the CIOC guidelines. The IT PM Certification web site was modified to reflect the changes to the IT PM Qualification process.